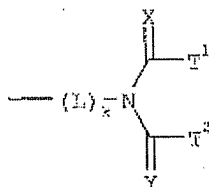


## AMENDMENTS TO THE CLAIMS

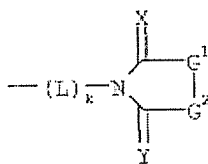
1. (Previously Presented) A polymer comprising a phenolic monomeric unit wherein the H atom of the hydroxy group of the phenolic monomeric unit is replaced by a N-imide group Q having the structure



wherein L is a linking group, wherein k is 0 or 1, wherein L is covalently bound to the O atom of the polymer when k is 1, or wherein the N atom of the N-imide group is covalently bound to the O atom of the polymer when k is 0, wherein X or Y are independently selected from O or S, and wherein T<sup>1</sup> and T<sup>2</sup> represent a terminal group.

2. (Original) A polymer according to claim 1 wherein the terminal groups T<sup>1</sup> and T<sup>2</sup> are independently selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein T<sup>1</sup> and T<sup>2</sup> together with the N-imide group represent the necessary atoms to form a cyclic structure, or wherein T<sup>1</sup> and T<sup>2</sup> represent the following structures -L<sup>1</sup>-R<sup>1</sup> and -L<sup>2</sup>-R<sup>2</sup>, wherein L<sup>1</sup> and L<sup>2</sup> represent independently a linking group, wherein R<sup>1</sup> and R<sup>2</sup> are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen, -CN, or -NO<sub>2</sub>, or therein two groups selected from each L<sup>1</sup>, L<sup>2</sup>, R<sup>1</sup> and R<sup>2</sup> together represent the necessary atoms to form a cyclic structure.

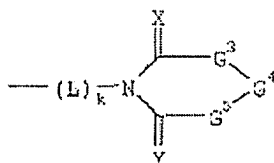
3. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has the following formula



wherein G<sup>1</sup> and G<sup>2</sup> are independently selected from O, S, NR<sup>3</sup> or CR<sup>4</sup>R<sup>5</sup>, with the limitation that G<sup>1</sup> is not O or S when G<sup>2</sup> is O and that G<sup>1</sup> is not O or S when G<sup>2</sup> is NR<sup>3</sup>, wherein R<sup>4</sup> and

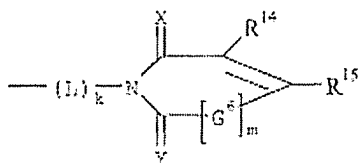
$R^5$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^3-R^6$ , wherein  $L^3$  is a linking group, wherein  $R^3$  and  $R^6$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$  and  $L^3$  together represent the necessary atoms to form a cyclic structure.

4. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has the following formula



wherein  $G^3$  to  $G^5$  are independently selected from O, S,  $NR^7$  or  $CR^8R^9$ , with the limitation that at least one group, selected from  $G^3$  to  $G^5$ , is  $CR^8R^9$  and that two neighboring groups, selected from  $G^3$  to  $G^5$ , are not represented by O and S, by O and  $NR^7$ , by S and  $NR^7$  or by O and O, or wherein  $G^4$  is a linking group, wherein  $R^8$  and  $R^9$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^4-L^{10}$ , wherein  $L^4$  is a linking group, wherein  $R^7$  and  $R^{10}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$  and  $L^4$  together represent the necessary atoms to form a cyclic structure.

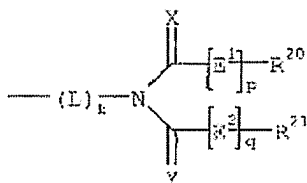
5. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has the following formula



wherein  $G^6$  is a group selected from O, S,  $NR^{11}$  or  $CR^{12}R^{13}$ , wherein  $m$  is 0 or 1, wherein  $R^{12}$  to  $R^{15}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^5-R^{16}$ ,

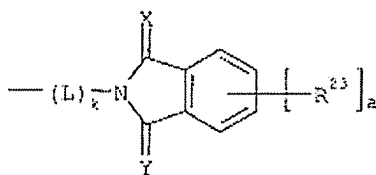
wherein  $L^5$  is a linking group, wherein  $R^{11}$  and  $R^{16}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $L^5$  together represent the necessary atoms to form a cyclic structure.

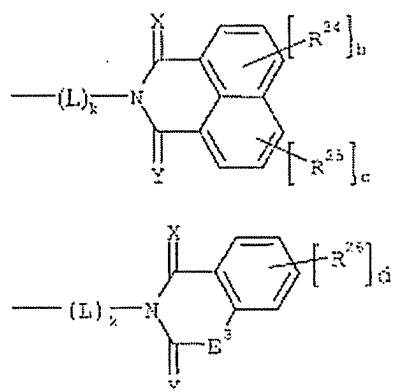
6. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has the following formula



wherein  $E^1$  and  $E^2$  are independently selected from O, S,  $NR^{17}$  or  $CR^{18}R^{19}$ , wherein  $p$  and  $q$  are independently 0 or 1, wherein  $R^{18}$  to  $R^{21}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^6-R^{22}$ , wherein  $L^6$  is a linking group, wherein  $R^{17}$  and  $R^{22}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

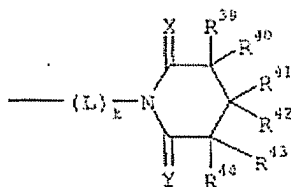
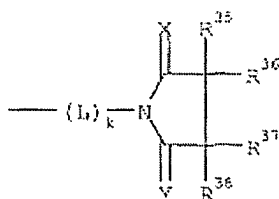
7. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has one of the following formula:





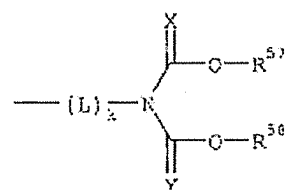
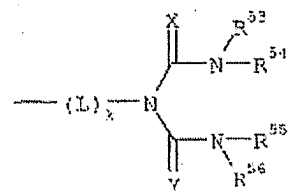
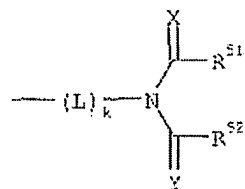
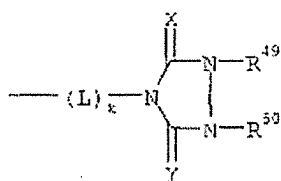
wherein each  $R^{23}$  to  $R^{26}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-\text{SO}_2\text{-NH-R}^{27}$ ,  $-\text{NH-SO}_2\text{-R}^{30}$ ,  $-\text{CO-NR}^{27}\text{-R}^{28}$ ,  $-\text{NR}^{27}\text{-CO-R}^{30}$ ,  $-\text{NR}^{27}\text{-CO-NR}^{28}\text{-R}^{29}$ ,  $-\text{NR}^{27}\text{-CS-NR}^{28}\text{-R}^{29}$ ,  $-\text{NR}^{27}\text{-CO-O-R}^{28}$ ,  $-\text{O-CO-NR}^{27}\text{-R}^{28}$ ,  $-\text{O-CO-R}^{30}$ ,  $-\text{CO-O-R}^{27}$ ,  $-\text{CO-R}^{27}$ ,  $-\text{SO}_3\text{-R}^{27}$ ,  $-\text{O-SO}_2\text{-R}^{30}$ ,  $-\text{SO}_2\text{-R}^{27}$ ,  $-\text{SO-R}^{30}$ ,  $-\text{P(=O)(-O-R}^{27})(\text{-O-R}^{28})$ ,  $-\text{O-P(=O)(-O-R}^{27})(\text{-O-R}^{28})$ ,  $-\text{NR}^{27}\text{-R}^{28}$ ,  $-\text{O-R}^{27}$ ,  $-\text{S-R}^{27}$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ ,  $-\text{N(-CO-R}^{27})(\text{-CO-R}^{28})$ ,  $-\text{N-phthalimidyl}$ ,  $-\text{M-N-phthalimidyl}$ , or  $-\text{M-R}^{27}$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^{27}$  to  $R^{29}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^{30}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein a and d are independently 0, 1, 2, 3 or 4, wherein b and c are independently 0, 1, 2 or 3, wherein  $E^3$  is selected from O, S,  $\text{NR}^{31}$  or  $\text{CR}^{32}\text{R}^{33}$ , wherein  $R^{32}$  and  $R^{33}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or  $-\text{L}^7\text{-R}^{34}$ , wherein  $\text{L}^7$  is a linking group, wherein  $R^{31}$  and  $R^{34}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

8. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has one of the following formula:



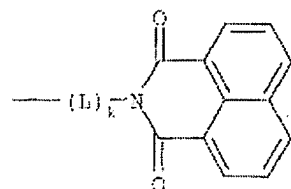
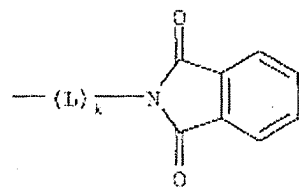
wherein  $R^{35}$  to  $R^{44}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-\text{SO}_2-\text{NH}-R^{45}$ ,  $-\text{NH}-\text{SO}_2-R^{48}$ ,  $-\text{CO}-\text{NR}^{45}-R^{46}$ ,  $-\text{NR}^{45}-\text{CO}-R^{48}$ ,  $-\text{NR}^{45}-\text{CO}-\text{NR}^{46}-R^{47}$ ,  $-\text{NR}^{45}-\text{CS}-\text{NR}^{46}-R^{47}$ ,  $-\text{NR}^{45}-\text{CO}-\text{O}-R^{46}$ ,  $-\text{O}-\text{CO}-\text{NR}^{45}-R^{46}$ ,  $-\text{O}-\text{CO}-R^{48}$ ,  $-\text{CO}-\text{O}-R^{45}$ ,  $-\text{CO}-R^{45}$ ,  $-\text{SO}_3-R^{45}$ ,  $-\text{O}-\text{SO}_2-R^{48}$ ,  $-\text{SO}_2-R^{45}$ ,  $-\text{SO}-R^{48}$ ,  $-\text{P}(=\text{O})(\text{O}-R^{45})(\text{O}-R^{46})$ ,  $-\text{O}-\text{P}(=\text{O})(\text{O}-R^{45})(\text{O}-R^{46})$ ,  $-\text{NR}^{45}-R^{46}$ ,  $-\text{O}-R^{45}$ ,  $-\text{S}-R^{45}$ ,  $-\text{CN}$ ,  $-\text{N}(-\text{CO}-R^{45})(-\text{CO}-R^{46})$ ,  $-\text{N-phthalimidyl}$ ,  $-\text{M-N-phthalimidyl}$ , or  $-\text{M}-R^{45}$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^{45}$  to  $R^{47}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, and wherein  $R^{48}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

9. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has one of the following formula:



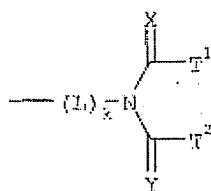
wherein  $\text{R}^{49}$  to  $\text{R}^{56}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, and wherein  $\text{R}^{57}$  and  $\text{R}^{58}$  are independently selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

10. (Previously Presented) A polymer according to claim 1 wherein the N-imide group Q has one of the following formula:



11. (Previously Presented) A polymer according to claim 1, wherein said polymer comprising a phenolic monomeric unit is a novolac, resol or polyvinylphenol.

12. (Previously Presented) A heat-sensitive lithographic printing plate precursor comprising a support having a hydrophilic surface and an oleophilic coating  $[[,]]$  provided on the hydrophilic surface, said coating comprising an infrared light absorbing agent and a polymer comprising a phenolic monomeric unit wherein the H atom of the hydroxy group of the phenolic monomeric unit is replaced by a N-imide group Q having the structure



wherein L is a linking group, wherein k is 0 or 1, wherein L is covalently bound to the O atom of the polymer when k is 1, or wherein the N atom of the N-imide group is covalently bound to the O atom of the polymer when k is 0, wherein X or Y are independently selected from O or S, and wherein T<sup>1</sup> and T<sup>2</sup> represent a terminal group.

13. (Original) A lithographic printing plate precursor according to claim 12, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

14. (Previously Presented) A lithographic printing plate precursor according to claim 13, wherein said dissolution inhibitor is selected from the group consisting of  
an organic compound which comprises at least one aromatic group and a hydrogen bonding site,

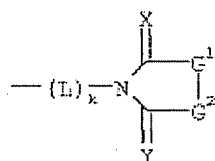
a polymer or surfactant comprising siloxane or perfluoroalkyl units, and mixtures thereof.

15. (Canceled)

16. (Previously Presented) A lithographic printing plate precursor according to claim 12, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

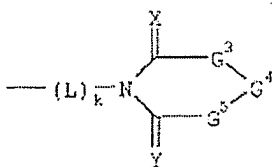
17. (Canceled)

18. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has the following formula



wherein  $G^1$  and  $G^2$  are independently selected from O, S,  $NR^3$  or  $CR^4R^5$ , with the limitation that  $G^1$  is not O or S when  $G^2$  is O and that  $G^1$  is not O or S when  $G^2$  is  $NR^3$ , wherein  $R^4$  and  $R^5$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^3-R^6$ , wherein  $L^3$  is a linking group, wherein  $R^3$  and  $R^6$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$  and  $L^3$  together represent the necessary atoms to form a cyclic structure.

19. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has the following formula

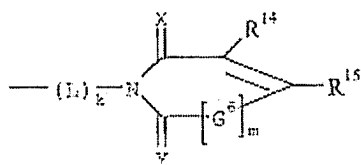


wherein  $G^3$  to  $G^5$  are independently selected from O, S,  $NR^7$  or  $CR^8R^9$ , with the limitation that at least one group, selected from  $G^3$  to  $G^5$ , is  $CR^8R^9$  and that two neighbouring groups, selected from  $G^3$  to  $G^5$ , are not represented by O and S, by O and  $NR^7$ , by S and  $NR^7$  or by O and O, or wherein  $G^4$  is a linking group, wherein  $R^8$  and  $R^9$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl,



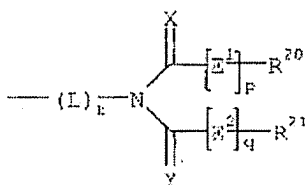
heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^4-L^{10}$ , wherein  $L^4$  is a linking group, wherein  $R^7$  and  $R^{10}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$  and  $L^4$  together represent the necessary atoms to form a cyclic structure.

20. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has the following formula



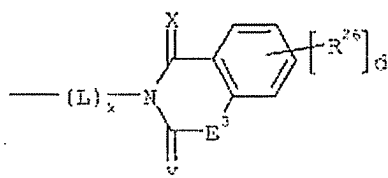
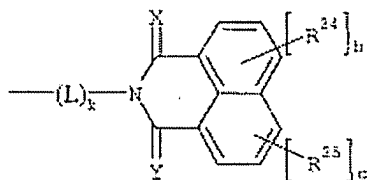
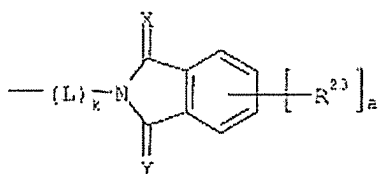
wherein  $G^6$  is a group selected from O, S,  $NR^{11}$  or  $CR^{12}R^{13}$ , wherein  $m$  is 0 or 1, wherein  $R^{12}$  to  $R^{15}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^5-R^{16}$ , wherein  $L^5$  is a linking group, wherein  $R^{11}$  and  $R^{16}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $L^5$  together represent the necessary atoms to form a cyclic structure.

21. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has the following formula



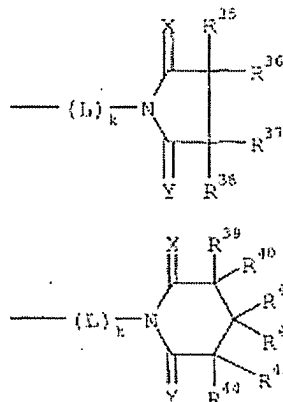
wherein  $E^1$  and  $E^2$  are independently selected from O, S,  $NR^{17}$  or  $CR^{18}R^{19}$ , wherein  $p$  and  $q$  are independently 0 or 1, wherein  $R^{18}$  to  $R^{21}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^6-R^{22}$ , wherein  $L^6$  is a linking group, wherein  $R^{17}$  and  $R^{22}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

22. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has one of the following formula:



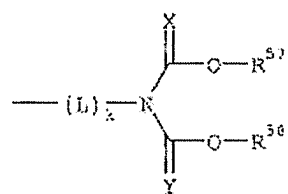
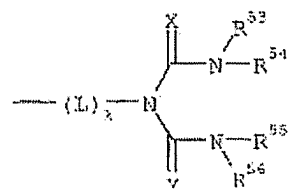
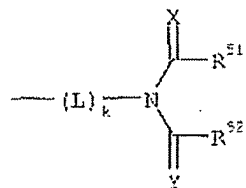
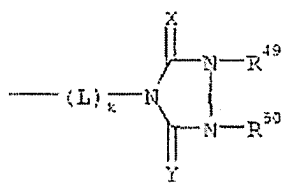
wherein each  $R^{23}$  to  $R^{26}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-\text{SO}_2-\text{NH}-R^{27}$ ,  $-\text{NH}-\text{SO}_2-R^{30}$ ,  $-\text{CO}-\text{NR}^{27}-R^{28}$ ,  $-\text{NR}^{27}-\text{CO}-R^{30}$ ,  $-\text{NR}^{27}-\text{CO}-\text{NR}^{28}-R^{29}$ ,  $-\text{NR}^{27}-\text{CS}-\text{NR}^{28}-R^{29}$ ,  $-\text{NR}^{27}-\text{CO}-\text{O}-R^{28}$ ,  $-\text{O}-\text{CO}-\text{NR}^{27}-R^{28}$ ,  $-\text{O}-\text{CO}-R^{30}$ ,  $-\text{CO}-\text{O}-R^{27}$ ,  $-\text{CO}-R^{27}$ ,  $-\text{SO}_3-R^{27}$ ,  $-\text{O}-\text{SO}_2-R^{30}$ ,  $-\text{SO}_2-R^{27}$ ,  $-\text{SO}-R^{30}$ ,  $-\text{P}(=\text{O})(-\text{O}-R^{27})(-\text{O}-R^{28})$ ,  $-\text{O}-\text{P}(=\text{O})(-\text{O}-R^{27})(-\text{O}-R^{28})$ ,  $-\text{NR}^{27}-R^{28}$ ,  $-\text{O}-R^{27}$ ,  $-\text{S}-R^{27}$ ,  $-\text{CN}$ ,  $-\text{NO}_2$ ,  $-\text{N}(-\text{CO}-R^{27})(-\text{CO}-R^{28})$ ,  $-\text{N}$ -phthalimidyl,  $-\text{M}-\text{N}$ -phthalimidyl, or  $-\text{M}-R^{27}$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^{27}$  to  $R^{29}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^{30}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein a and d are independently 0, 1, 2, 3 or 4, wherein b and c are independently 0, 1, 2 or 3, wherein  $E^3$  is selected from O, S,  $\text{NR}^{31}$  or  $\text{CR}^{32}\text{R}^{33}$ , wherein  $R^{32}$  and  $R^{33}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or  $-\text{L}^7-R^{34}$ , wherein  $\text{L}^7$  is a linking group, wherein  $R^{31}$  and  $R^{34}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

23. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has one of the following formula:



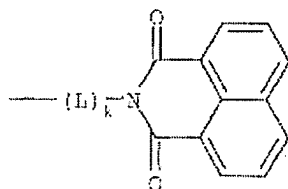
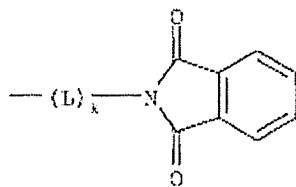
wherein  $R^{35}$  to  $R^{44}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-\text{SO}_2-\text{NH}-R^{45}$ ,  $-\text{NH}-\text{SO}_2-R^{48}$ ,  $-\text{CO}-\text{NR}^{45}-R^{46}$ ,  $-\text{NR}^{45}-\text{CO}-R^{48}$ ,  $-\text{NR}^{45}-\text{CO}-\text{NR}^{46}-R^{47}$ ,  $-\text{NR}^{45}-\text{CS}-\text{NR}^{46}-R^{47}$ ,  $-\text{NR}^{45}-\text{CO}-\text{O}-R^{46}$ ,  $-\text{O}-\text{CO}-\text{NR}^{45}-R^{46}$ ,  $-\text{O}-\text{CO}-R^{48}$ ,  $-\text{CO}-\text{O}-R^{45}$ ,  $-\text{CO}-R^{45}$ ,  $-\text{SO}_3-R^{45}$ ,  $-\text{O}-\text{SO}_2-R^{48}$ ,  $-\text{SO}_2-R^{45}$ ,  $-\text{SO}-R^{48}$ ,  $-\text{P}(=\text{O})(\text{O}-R^{45})(\text{O}-R^{46})$ ,  $-\text{O}-\text{P}(=\text{O})(\text{O}-R^{45})(\text{O}-R^{46})$ ,  $-\text{NR}^{45}-R^{46}$ ,  $-\text{O}-R^{45}$ ,  $-\text{S}-R^{45}$ ,  $-\text{CN}$ ,  $-\text{N}(\text{CO}-R^{45})(\text{CO}-R^{46})$ ,  $-\text{N-phthalimidyl}$ ,  $-\text{M-N-phthalimidyl}$ , or  $-\text{M}-R^{45}$ , wherein M represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^{45}$  to  $R^{47}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^{48}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

24. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has one of the following formula:



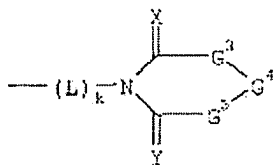
wherein  $\text{R}^{49}$  to  $\text{R}^{56}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, and wherein  $\text{R}^{57}$  and  $\text{R}^{58}$  are independently selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

25. (Previously Presented) A polymer according to claim 2 wherein the N-imide group Q has one of the following formula:



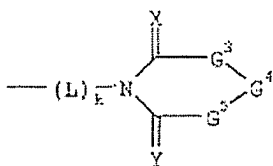
26. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the terminal groups  $T^1$  and  $T^2$  are independently selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein  $T^1$  and  $T^2$  together with the N-imide group represent the necessary atoms to form a cyclic structure, or wherein  $T^1$  and  $T^2$  represent the following structures  $-L^1-R^1$  and  $-L^2-R^2$ , wherein  $L^1$  and  $L^2$  represent independently a linking group, wherein  $R^1$  and  $R^2$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-CN$ , or  $-NO_2$ , or therein two groups selected from each  $L^1$ ,  $L^2$ ,  $R^1$  and  $R^2$  together represent the necessary atoms to form a cyclic structure.

27. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has the following formula



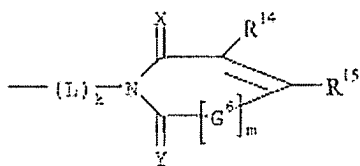
wherein  $G^3$  to  $G^5$  are independently selected from O, S,  $NR^7$  or  $CR^8R^9$ , with the limitation that at least one group, selected from  $G^3$  to  $G^5$ , is  $CR^8R^9$  and that two neighboring groups, selected from  $G^3$  to  $G^5$ , are not represented by O and S, by O and  $NR^7$ , by S and  $NR^7$  or by O and O, or wherein  $G^4$  is a linking group, wherein  $R^8$  and  $R^9$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^4-L^{10}$ , wherein  $L^4$  is a linking group, wherein  $R^7$  and  $R^{10}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$  and  $L^4$  together represent the necessary atoms to form a cyclic structure.

28. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has the following formula



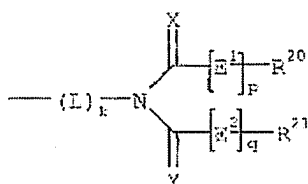
wherein  $G^3$  to  $G^5$  are independently selected from O, S,  $NR^7$  or  $CR^8R^9$ , with the limitation that at least one group, selected from  $G^3$  to  $G^5$ , is  $CR^8R^9$  and that two neighboring groups, selected from  $G^3$  to  $G^5$ , are not represented by O and S, by O and  $NR^7$ , by S and  $NR^7$  or by O and O, or wherein  $G^4$  is a linking group, wherein  $R^8$  and  $R^9$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^4-L^{10}$ , wherein  $L^4$  is a linking group, wherein  $R^7$  and  $R^{10}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$  and  $L^4$  together represent the necessary atoms to form a cyclic structure.

29. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has the following formula



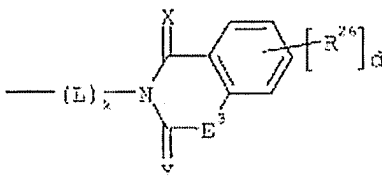
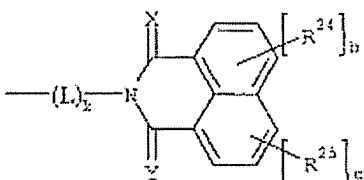
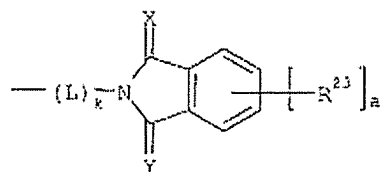
wherein  $G^6$  is a group selected from O, S,  $NR^{11}$  or  $CR^{12}R^{13}$ , wherein  $m$  is 0 or 1, wherein  $R^{12}$  to  $R^{15}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^5-R^{16}$ , wherein  $L^5$  is a linking group, wherein  $R^{11}$  and  $R^{16}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or wherein two groups selected from each  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $L^5$  together represent the necessary atoms to form a cyclic structure.

30. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has the following formula



wherein  $E^1$  and  $E^2$  are independently selected from O, S,  $NR^{17}$  or  $CR^{18}R^{19}$ , wherein  $p$  and  $q$  are independently 0 or 1, wherein  $R^{18}$  to  $R^{21}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group or  $-L^6-R^{22}$ , wherein  $L^6$  is a linking group, wherein  $R^{17}$  and  $R^{22}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

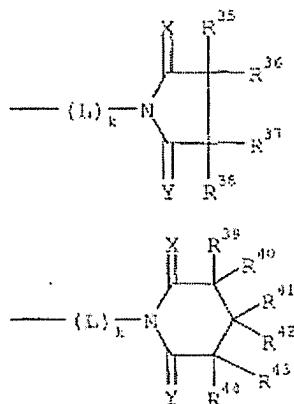
31. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has one of the following formula:



wherein each  $R^{23}$  to  $R^{26}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-SO_2-NH-R^{27}$ ,  $-NH-SO_2-R^{30}$ ,  $-CO-NR^{27}-R^{28}$ ,  $-NR^{27}-CO-R^{30}$ ,  $-NR^{27}-CO-NR^{28}-R^{29}$ ,  $-NR^{27}-CS-NR^{28}-R^{29}$ ,  $-NR^{27}-CO-O-R^{28}$ ,  $-O-CO-NR^{27}-R^{28}$ ,  $-O-CO-R^{30}$ ,  $-CO-O-R^{27}$ ,  $-CO-R^{27}$ ,  $-SO_3-R^{27}$ ,  $-O-SO_2-R^{30}$ ,  $-SO_2-R^{27}$ ,  $-SO-R^{30}$ ,  $-P(=O)(-O-R^{27})(-O-R^{28})$ ,  $-O-P(=O)(-O-R^{27})(-O-R^{28})$ ,  $-NR^{27}-R^{28}$ ,  $-O-R^{27}$ ,  $-S-R^{27}$ ,  $-CN$ ,  $-NO_2$ ,  $-N(-CO-R^{27})(-CO-R^{28})$ ,  $-N$ -phthalimidyl,  $-M$ -N-phthalimidyl, or  $-M-R^{27}$ , wherein  $M$  represents a divalent linking group

containing 1 to 8 carbon atoms, wherein  $R^{27}$  to  $R^{29}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein  $R^{30}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, wherein a and d are independently 0, 1, 2, 3 or 4, wherein b and c are independently 0, 1, 2 or 3, wherein  $E^3$  is selected from O, S,  $NR^{31}$  or  $CR^{32}R^{33}$ , wherein  $R^{32}$  and  $R^{33}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, or  $-L^7-R^{34}$ , wherein  $L^7$  is a linking group, wherein  $R^{31}$  and  $R^{34}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

32. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has one of the following formula:

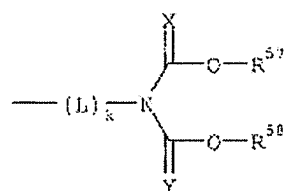
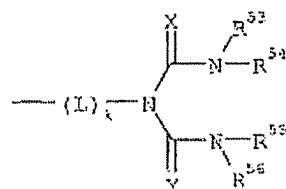
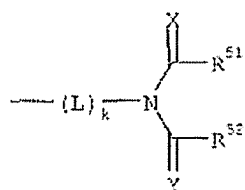
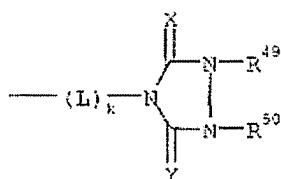


wherein  $R^{35}$  to  $R^{44}$  are independently selected from hydrogen, an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group, halogen,  $-SO_2-NH-R^{45}$ ,  $-NH-SO_2-R^{48}$ ,  $-CO-NR^{45}-R^{46}$ ,  $-NR^{45}-CO-R^{48}$ ,  $-NR^{45}-CO-NR^{46}-R^{47}$ ,  $-NR^{45}-CS-NR^{46}-R^{47}$ ,  $-NR^{45}-CO-O-R^{46}$ ,  $-O-CO-NR^{45}-R^{46}$ ,  $-O-CO-R^{48}$ ,  $-CO-O-R^{45}$ ,  $-CO-R^{45}$ ,  $-SO_3-R^{45}$ ,  $-O-SO_2-R^{48}$ ,  $-SO_2-R^{45}$ ,  $-SO-R^{48}$ ,  $-P(=O)(O-R^{45})(-O-R^{46})$ ,  $-O-P(=O)(-O-R^{45})(-O-R^{46})$ ,  $-NR^{45}-R^{46}$ ,  $-O-R^{45}$ ,  $-S-R^{45}$ ,  $-CN$ ,  $-N(-CO-R^{45})(-CO-R^{46})$ ,  $-N$ -phthalimidyl,  $-M$ - $N$ -phthalimidyl, or  $-M-R^{45}$ , wherein  $M$  represents a divalent linking group containing 1 to 8 carbon atoms, wherein  $R^{45}$  to  $R^{47}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl



group, wherein  $R^{48}$  is selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

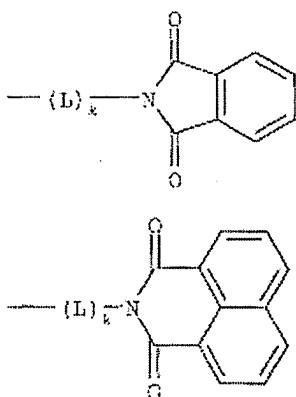
33. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has one of the following formula:



wherein  $R^{49}$  to  $R^{56}$  are independently selected from hydrogen or an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group,

and wherein  $R^{57}$  and  $R^{58}$  are independently selected from an optionally substituted alkyl, alkenyl, alkynyl, cycloalkyl, heterocyclic, aryl, heteroaryl, aralkyl or heteroaralkyl group.

34. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 12, wherein the N-imide group Q has one of the following formula:



35. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 26, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

36. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 27, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

37. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

38. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 29, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

39. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 30, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

40. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 31, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

41. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 32, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

42. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 33, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

43. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 34, wherein said coating further comprises a dissolution inhibitor and wherein said precursor is a positive working lithographic printing plate precursor.

44. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 26, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

45. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 27, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

46. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 28, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

47. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 29, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

48. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 30, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

49. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 31, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

50. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 32, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

51. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 33, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

52. (Previously Presented) A heat-sensitive lithographic printing plate precursor according to claim 34, wherein said coating further comprises a latent Brönsted acid and an acid-crosslinkable compound and wherein said precursor is a negative working lithographic printing plate precursor.

This listing of claims replaces all prior versions, and listings, of claims in the application.